

PART A OF THE SUPPORTING STATEMENT FOR STANDARD FORM 83-I

ENGINE TEST CELLS/STANDS

1. Identification of the Information Collection

1. *Title of the Information Collection.*

“Recordkeeping and Reporting Requirements for the Engine Test Cells/Stand National Emission Standards for Hazardous Air Pollutants.” This is a new information collection request (ICR) and the tracking number is EPA ICR 2066.01.

2. *Short Characterization.*

This ICR is prepared for a U.S. Environmental Protection Agency (EPA) rulemaking developed under authority of Section 112 of the Clean Air Act (CAA). The rulemaking amends Title 40, Chapter I, Part 63 of the Code of Federal Regulations (CFR) by adding a new subpart PPPPP-- National Emission Standards for Hazardous Air Pollutants: Engine Test Cells/Standards. Hereafter, this subpart is referred to as the "engine test cells/stands NESHAP". The engine test cells/stands NESHAP includes standards for major sources of hazardous air pollutant (HAP) emissions. Respondents are owners or operators of major source facilities that test uninstalled engines in engine test cells/stands. An engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines. A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

This information collection applies only to new or reconstructed test cells/stands located at major source facilities used for testing internal combustion engines with a rated power of 25 horsepower (hp) or more. It is estimated that 37 new or reconstructed major source facilities will be subject to the provisions of this NESHAP in the United States during the three year period after promulgation. These new or reconstructed sources must be in compliance with the requirements of the engine test cells/stands NESHAP upon startup of the new or reconstructed engine test cell/stand.

The engine test cells/stands NESHAP requires new or reconstructed test cells/stands used for testing internal combustion engines to submit a one-time Initial Notification. For new or reconstructed engine test cells/stands with startup before the effective date of this subpart, the Initial Notification is due not later than 120 calendar days after the effective date of the subpart. For new or reconstructed engine test cells/stands with startup on or after the effective date of this subpart, the Initial Notification is due not later than 120 calendar days after the source becomes subject to this subpart.

Owners or operators of new or reconstructed test cells/stands used for testing internal combustion engines with a rated power of 25 hp or more are required to submit a semi-annual report. If there were no deviations from the emission limitation and the continuous emission monitoring system (CEMS) was operating correctly, the report must contain a statement by the

responsible official that there was no deviation from the emission limitation and that the CEMS was not out-of-control as defined in §63.8(c)(7). For each emission limitation deviation and/or CEMS deviation, the report must contain detailed information on the nature of the deviation(s). All records should be maintained for a period of 5 years and should be maintained at the source for a period of at least 2 years.

Owners and operators of affected sources are subject to the requirements of 40 CFR Part 63, Subpart A, the General Provisions, unless the regulation specifies otherwise.

The engine test cells/stands NESHAP also requires affected sources to submit a Notification of Compliance Status. This notification must be signed by a responsible company official who certifies the truth, accuracy, and completeness of the content of the report and certifies that the source has complied with the standards. In addition, the affected sources are required to use CEMS to monitor compliance with the standard and are required to conduct a performance evaluation of the CEMS. For new or reconstructed engine test cells/stands with startup before the effective date of this subpart, the performance evaluation of the CEMS must be completed within 180 days after the effective date of the subpart. For new or reconstructed engine test cells/stands with startup on or after the effective date of this subpart, the performance evaluation of the CEMS must be completed within 180 days after startup.

The results of the performance evaluation must be submitted to the EPA in the Notification of Compliance Status. For new or reconstructed affected sources, the Notification of Compliance Status must be submitted before the close of business on the 30th calendar day following the completion of the performance evaluation of the CEMS.

Each facility is required to submit all necessary reports to the respondent's Regional, State, local or tribal agency, whichever has been delegated enforcement authority by EPA. The information is used to determine that all sources subject to the NESHAP are achieving the requirements.

2. Need For and Use of the Collection

(a) *Need/Authority for the Collection.*

The EPA is charged under Section 112(d) of the CAA to establish standards to limit HAP emissions from stationary sources. In the Administrator's judgment, the engine test industry causes or contributes significantly to air pollution that may reasonably be anticipated to endanger public health or welfare. Engine test operations are listed as an affected source category in a *Federal Register* notice dated July 16, 1992 (57 FR 31576).

Section 114 of the CAA gives the EPA authority to collect data and information necessary to enforce standards established under Section 112 of the CAA. Certain records and reports are necessary to enable the Administrator to: (1) identify new or reconstructed sources subject to the engine test cells/stands NESHAP, and (2) ensure that the engine test cells/stands NESHAP,

based on maximum achievable control technology (MACT) for major sources, is being achieved.

(b) *Use/Users of the Data.*

The EPA's enforcement personnel will use the emissions data collected by each engine test cells/stands facility to (1) identify new or reconstructed HAP emission sources subject to the engine test cells/stands NESHAP, and (2) ensure the proper regulation of HAP emissions.

The records will also be useful in identifying facilities that are out of compliance with the terms of the engine test cells/stands NESHAP.

3. Nonduplication, Consultations, and Other Collection Criteria

(a) *Nonduplication.*

A search of the EPA's existing standards and ongoing ICRs revealed no duplication of information gathering efforts. However, certain reports required by State or local agencies may duplicate information required by the engine test cells/stands NESHAP. In such cases, a copy of the report submitted to the State or local agency can be provided to the Administrator in lieu of the report required by the engine test cells/stands NESHAP.

(b) *Public Notice Required Prior to ICR Submission to OMB.*

Since this is a rule-related ICR, it is not necessary to solicit public comments prior to submittal of this ICR to OMB. However, a public review and comment period will occur after proposal of the engine test cells /stands NESHAP in the Federal Register.

(c) *Consultations.*

Consultations were conducted with various representatives of industry and trade associations during the development of the engine test cells/stands NESHAP. The following persons provided input during development of the rule:

Name	Affiliation	Telephone
Jim Sumner	GE Aircraft Engines	(513) 672-3986
Chuck Knauss	Swidler Berlin Shereff Friedman	(202) 424-7644
Everett Douglas	US DoD-US Navy	(619) 545-2914
John McKnight	National Marine Manufacturers Association	(202) 721-1604
Jeff Nobles	Delta Air Lines/ATA	(404) 714-0063
Cathy Jo Seamon	Ford Motor Company	(313) 390-3799
Barbara Barron	Watson & Barron	(919) 828-4402
Mary Tillman	Consultant, Mercury Marine	(405) 747-4545
Norman Helgeson	Naval Facilities Engineering Service Center	(805) 982-1335

(d) *Effects of Less Frequent Collection.*

If results were collected less frequently, there would be little assurance that each source was in continuous compliance with the NESHAP. Also, the EPA's authority to take administrative action would be reduced.

(e) *General Guidelines.*

None of the recordkeeping or reporting requirements contained in 40 CFR Part 63 Subpart P or otherwise pertinent to this request violate any of the regulations established by OMB in 5 CFR 1320.6.

(f) *Confidentiality.*

Confidential business information will be handled using Agency guidelines on confidentiality, set forth in Title 40 Chapter 1, Part 2 Subpart B - Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

(g) *Sensitive Questions.*

Information to be reported consists of emission data and other information that are not of a sensitive nature. No sensitive personal or proprietary data are being collected.

4. The Respondents and the Information Requested

(a) *Respondents/SIC and NAICS Codes.*

Respondents are owners or operators of facilities that test uninstalled engines in engine test cells/stands. Since the government is in the process of transitioning from Standard Industrial Classification codes to North American Industrial Classification System codes, both are presented in the following table. Respondents in these SIC/NAICS codes are only affected if engine test cells/stands are used for testing internal combustion engines with a rated power of 25 hp or more and the facility is a major source of HAP emissions.

SIC and NAICS Codes of Affected Engine Test Cells/Stands Facilities

SIC Codes	NAICS Codes
3511, 3519, 3523, 3524, 3531, 3559, 3566, 3599, 3621, 3711, 3714, 3721, 3724, 3761, 3764, 4226, 4512, 4581, 5541, 7538, 7539, 7699, 8299, 8711, 8731, 8734, 8741, 9661, 9711	333112, 332212, 333120, 333611, 333612, 333618, 333111, 333319, 335312, 336111, 336120, 336112, 336399, 336992, 336312, 336350, 336411, 336412, 336414, 336415, 481111, 488190, 54171, 541380, 611692, 811111, 811118, 811310, 811411, 92711, 92811

This list is not meant to be exhaustive; other SIC/NAICS Codes could be included if the facility fulfills the definition of an engine test cell/stand and is considered a major source of HAP emissions.

(b) Information Requested.

(i) Data items, including recordkeeping requirements

All data in this ICR that is recorded and/or reported is required by 40 CFR Part 63 Subpart P. All new or reconstructed test cells/stands used for testing uninstalled internal combustion engines located at major source facilities must fulfill these requirements.

Notifications

Initial Notification	63.9345(b), 63.5(d), 63.9(b)
Notification of Compliance Status	63.9345(c), 63.9(h)
Notification of Intent to Conduct CEMS Performance Evaluation	63.9345(d), 63.8(e)(2)
Performance Evaluation	63.9320(b), 63.9325(c)(2), 63.8(e)
Notification of alternative monitoring method	63.8(f)(4)
Waiver of recordkeeping or reporting requirements	63.10(f)
Additional notifications	63.8(e), 63.8(f)(4), 63.8(f)(6), 63.9(b), 63.9(g)(1), 63.9(g)(2), 63.9(h), 63.9(j)

Reports

Semiannual compliance report	63.9340(b), 63.9350(a), 63.9350(b), 63.9350(c), 63.9350(d), 63.10(a), 63.10(e)
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Recordkeeping

Emission test results and other data needed to determine compliance with emission limitation	63.9355(c)
All reports and notifications	63.9355(a), 63.10(b)
Record of applicability	63.10(b)(3)
Records for sources with continuous monitoring systems	63.9325(d)(2)(i), 63.9355(a)(2), 63.9355(b), 63.10(b), 63.10(c)
Records for initial notification and notification of compliance status	63.9355(a)(1), 63.10(b)(2)(xiv)

Records are required to be retained for 5 years. All MACT standards require 5 years of record retention. The first 2 years of records must be kept onsite.

(ii) Respondent Activities

Read regulation

Notifications

- Initial Notification

- Notification of construction/reconstruction

- Notification of anticipated startup

- Notification of actual startup

- Notification of CEMS performance evaluation

Required activities

- CEMS performance evaluation

- Demonstration of CEMS

- Repeat of CEMS performance evaluation

- CEMS training for personnel each year

- Maintain records of CEMS performance on a weekly basis

Create information

Gather existing information

Write semi-annual report

- Write compliance status report

- Write performance test report

- Write deviation report

5. Agency Activities, Collection Methodology, and Information Management

(a) *Agency Activities.*

Attend CEMS performance evaluation

Repeat CEMS performance evaluation

Retesting preparation

Attend retesting

Deviations--enforcement activities

Reporting requirements

Review regulation

Review compliance status report

Review performance evaluation report

Review deviation report

(b) *Collection Methodology and Management.*

Following notification of startup, the reviewing authority might inspect the source to determine whether the CEMS are properly installed and operated. Performance evaluation reports are used by the Agency to determine the capability of the source to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports will be entered into the Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS) that is maintained and operated by the EPA's Office of Air Quality Planning and Standards (OAQPS). AIRS is EPA's database for the collection, maintenance, and retrieval of compliance and annual emission inventory data for over 100,000 industrial and government-owned facilities. EPA uses AIRS for tracking air pollution compliance and enforcement by Local and State regulatory agencies, and EPA Regional Offices and Headquarters. EPA and its delegated Authorities can edit, store, retrieve, and analyze the data. The records required by this regulation must be retained by the owner or operator for five years and maintained at the site for two years.

(c) *Small Entity Flexibility.*

The recordkeeping and reporting burden is the same for all entities, regardless of size. The requirements are viewed by the agency as the minimum needed to ensure compliance and cannot reduce them further for small entities.

(d) *Collection Schedule.*

Data collection will begin after the promulgation date of the engine test cells/stands NESHAP, tentatively scheduled for April 2002. The schedule for reports required by the engine test cells/stands NESHAP and the General Provisions is detailed below.

The Initial Notification is due not later than 120 calendar days after the promulgation date of the subpart or the startup date of the source, whichever is later, for all new or reconstructed test cells/stands used for testing internal combustion engines.

The Notification of Compliance Status, including CEMS performance evaluation results, must be submitted no later than 30 days following the completion of the performance evaluation.

Major sources of HAP emissions that contain new or reconstructed test cells/stands used for testing internal combustion engines with a rated power of 25 hp or more are required to submit periodic reports on a semiannual basis.

6. Estimating the Burden and Cost of the Collection

(a) *Estimating Respondent Burden.*

The major source annual burden estimates for recordkeeping and reporting are presented in Tables 1 through 4. The annual burden estimates are based on an estimated 37 new or reconstructed affected major sources in the engine test cells/stands industry during the three years after promulgation. Tables 1 through 3 show the cost burden during the first, second and third year after promulgation. Table 4 shows the total costs for the three year period and the average cost and labor requirements per facility. All assumptions made in the labor estimates are included as footnotes to the tables.

Labor hours are estimated to be 32,000 technical labor hours, 1,600 management labor hours, and 3,200 clerical hours for all 37 major source facilities during the first three years after promulgation.

(b) *Estimating Respondent Costs.*

(i) *Estimating Labor Costs*

Before the costs of recordkeeping and reporting were tabulated, an hourly labor rate was established for the affected industry. The labor rates for technical, management, and clerical staff were calculated using Bureau of Labor Statistics data. The hourly rates used for technical, managerial, and clerical were \$45.04, \$66.73 and \$28.14, respectively. These rates include overhead, profit, and all employee benefits. The total impact is estimated to be \$1,618,600. This estimate is based on the assumption that there will be 37 new or reconstructed test cells/stands used for testing internal combustion engines with a rated power of 25 hp or more located at major sources beginning operation in the three years after promulgation.

(ii) *Estimating Monitoring Costs*

This subpart requires the installation of CEMS for all new or reconstructed test cells/stands used for testing internal combustion engines with a rated power of 25 hp or more. Monitoring costs include capital costs, operation and maintenance (O&M) costs, and capital recovery costs. The costs were determined using EPA's CEMS Cost Model Version 3.0, updated in 1998.

Capital costs include the costs to purchase, install, and start up the monitoring equipment. The estimated capital investment is \$142,700 per device. Assuming 37 new or reconstructed facilities will be required to purchase this equipment, the total capital investment is \$5.3 million.

Operation and maintenance costs include the costs to operate and maintain the CEMS, perform the annual relative accuracy test audit (RATA), quarterly CGAs, recordkeeping, and an annual review and update of the CEMS. These costs are approximately \$23,400 per device or a total of \$1,731,600 for the first three years after promulgation.

The capital recovery cost for the CEMS is calculated as the capital investment cost multiplied by the capital recovery factor. The capital recovery factor is calculated using 10 years and a seven percent interest rate. The capital recovery cost is \$20,300 per device or a total of \$1,503,600 for the first three years after promulgation.

The overall cost of monitoring equipment is estimated at \$43,700 per facility or a total of \$3,235,200 for the first three years after promulgation. All monitoring costs are included in Tables 1 through 4.

(c) *Estimating Agency Burden and Cost.*

Because the information collection requirements were developed as an incidental part of the engine test cells/stands NESHAP, no costs can be attributed to the development of the information collection requirements.

Because recordkeeping and reporting requirements on the part of the respondents are required under section 112 of the CAA, no operational costs will be incurred by the Federal government. Publication and distribution of the information are part of the AFS operated and maintained by the EPA's OAQPS, with the result that no Federal costs can be directly attributed to the ICR.

Examination of records to be maintained by the respondents will occur incidentally as part of the periodic inspection of sources that is part of the EPA's overall compliance and enforcement program and, therefore, is not attributable to the ICR. The only costs that the Federal government will incur are user costs associated with the analysis of the reported information, as shown in 5(a). Labor rates and associated costs are based on 2000 labor rates from the U.S. Office of Personnel Management (OPM). The estimated wage rates are \$67.44/hr (GS-15/3 level) for management, \$40.80/hr (GS-12/3 level) for technical, and \$22.99/hr (GS-6/3 level) for clerical. Again, for this analysis, it is assumed that each labor hour is composed of 5 percent management, 85 percent technical, and 10 percent administrative, resulting in an hourly rate of \$46.47/hr. This hourly rate includes a factor of 1.6 to account for employee benefits.

Using the labor rates and applying them to the activities shown in 5(a), the total agency burden is \$24,850 for the first three years following promulgation. All calculations are shown in Table 5, with footnotes for all assumptions used.

(d) *Estimating Respondent Universe and Total Burden Cost.*

The number of new or reconstructed major sources subject to MACT Subpart P is estimated to be 37. The total recordkeeping and reporting burden for the 37 new or reconstructed major sources is estimated to total \$4,853,778 for the three years following promulgation.

(e) *Bottom Line Burden Hours and Cost Tables.*

Please refer to Tables 1 through 5.

(f) *Reasons for Change in Burden.*

This section does not apply because this is a new collection.

(g) *Burden Statement.*

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Include the EPA ICR number 2066.01 in any correspondence.

PART B OF THE SUPPORTING STATEMENT

This part is not applicable because no statistical methods were used in collecting this information.

Table 1. Estimated Burden to Industry to Implement Reporting and Recordkeeping Requirements for First Year after Promulgation

	(A) Person- hours per occurrence	(B) Number of occurrences per year	(C) Person-hours per respondent per year (C = A x B)	(D) Respondents per year	(E) Technical person-hours per year (E = C x D)	(F) Management person-hours per year (F = E x 0.05)	(G) Clerical person- hours per year (G = E x 0.1)	(H) Cost, \$(a)
Burden item								
1. Applications	N/A							
2. Surveys and studies	N/A							
3. Reporting requirements								
A. Read regulation (b)	4	1	4	12	49	2	5	2,525
B. Notifications (c, d)								
Initial Notification (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of construction/reconstruction (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of anticipated startup (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of actual startup (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of demonstration of CEMS (c, d)	2	1	2	12.3	25	1	2	1,263
C. Required activities								
Initial performance evaluation (e, d)	330	1	330	12.3	4,070	204	407	208,345
Demonstration of CEMS (e, d)	148	1	148	12.3	1,825	91	183	93,440
Repeat of performance evaluation (e, f, d)	330	0.2	66	12.3	814	41	81	41,669
CEMS training for personnel each year (c, d)	32	1	32	12.3	395	20	39	20,203
Maintain records of CEMS performance on a weekly basis (c)	1.5	50	75	12.3	925	46	93	47,351
D. Create information	Incl. in 3C							0
E. Gather existing information	Incl. in 3C							0
F. Write semi-annual report								
Write compliance status report (c)	4	2	8	12	99	5	10	5,051
Write performance evaluation report (g, d)	16	1	16	12.3	197	10	20	10,102
Write deviation report (c, h)	16	2	32	0.12	4	0	0	202
TOTAL RECURRENT BURDEN AND COST (R&R)					8,502	425	881	435,202
AVERAGE RECURRENT BURDEN AND COST PER FACILITY (R&R)					77	4	8	3,921
Monitoring costs								
ANNUAL CAPITAL COSTS FOR MONITORING EQUIPMENT (i)								1,759,967
ANNUALIZED CAPITAL COSTS FOR MONITORING EQUIPMENT (i)								250,600
TOTAL ANNUAL COSTS (O & M) (k)								288,600
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								539,200
AVERAGE RECURRENT COSTS PER FACILITY (MONITORING)								43,700

- a Costs are based on the following hourly rates: technical at \$45.04, management at \$66.73, and clerical at \$28.14. The composite hourly labor rate is \$51.19/hr ($45.04 + 0.05 \times 66.73 + 0.1 \times 28.14 = 51.19$).
- b Assumes 1/3 of all 37 new major source facilities will come on line in this year and all will read the regulation.
- c Person-hours per occurrence are from ESD manual Table 3 "Burden of NSPS and NESHAP Notification Reports, Excess Emission Reports and Recordkeeping".
- d Assumes 37 facilities will comply over the three year period or 12.3 per year.
- e Person-hours per occurrence are from ESD manual Table 4 "Burden of Performance Tests and Continuous Monitoring System (CMS) Demonstrations".
- f Assumes 20% of performance evaluations will be failures, requiring repeats.
- g Assumes one evaluation for each facility.
- h Assumes 1% of 49.3 (148 over 3 years) new major source test cells/stands will be out of compliance.
- i Each continuous emission monitoring system (CEMS), which are required on all outlet streams, costs \$142,700. The total cost for CEMS is 12.3 facilities ($37/3$) \times \$142,700 = \$1,759,967.
- j Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i \times (1+i)^t / ((1+i)^t - 1)$ where i =interest rate (7%) and t =equipment life (10 years). $CRF=0.1423$.
- k O&M for monitors includes operation and maintenance, annual RATA, quarterly CGA's, recordkeeping, and annual review and update.

Table 2. Estimated Burden to Industry to Implement Reporting and Recordkeeping Requirements for Second Year after Promulgation

Burden item	(A) Person- hours per occurrence	(B) Number of occurrences per year	(C) Person-hours per respondent per year (C = A x B)	(D) Respondent s per year	(E) Technical person-hours per year (E = C x D)	(F) Management person-hours per year (F = E x 0.05)	(G) Clerical person- hours per year (G = E x 0.1)	(H) Cost, \$(a)
1. Applications	N/A							
2. Surveys and studies	N/A							
3. Reporting requirements								
A.Read regulation (b)	4	1	4	12	49	2	5	2,525
B.Notifications (c, d)								
Initial Notification (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of construction/reconstruction (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of anticipated startup (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of actual startup (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of demonstration of CEMS (c, d)	2	1	2	12.3	25	1	2	1,263
C.Required activities								
Initial performance evaluation (e, d)	330	1	330	12.3	4,070	204	407	208,345
Demonstration of CEMS (e, d)	148	1	148	12.3	1,825	91	183	93,440
Repeat of performance evaluation (e, f, d)	330	0.2	66	12.3	814	41	81	41,669
CEMS training for personnel each year (c, g)	32	1	32	24.7	789	39	79	40,406
Maintain records of CEMS performance on a weekly basis (c, g)	1.5	50	75	24.7	1,850	93	185	94,702
D.Create information	Incl. in 3C							0
E.Gather existing information	Incl. in 3C							0
F.Write semi-annual report								
Write compliance status report (c, g)	4	2	8	25	197	10	20	10,102
Write performance evaluation report (h, d)	16	1	16	12.3	197	10	20	10,102
Write deviation report (c, g, i)	16	2	32	0.25	8	0	1	404
TOTAL RECURRENT BURDEN AND COST (R&R)					9,924	496	992	508,009
AVERAGE RECURRENT BURDEN AND COST PER FACILITY (R&R)					89	4	9	4,577
Monitoring costs								
ANNUAL CAPITAL COSTS FOR MONITORING EQUIPMENT (j)								1,759,967
ANNUALIZED CAPITAL COSTS FOR MONITORING EQUIPMENT (k)								501,200
TOTAL ANNUAL COSTS (O & M) (l)								577,200
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								1,078,400
AVERAGE RECURRENT COSTS PER FACILITY (MONITORING)								87,400

^a Costs are based on the following hourly rates: technical at \$45.04, management at \$66.73, and clerical at \$28.14. The composite hourly labor rate is \$51.19/hr (45.04 + 0.05 x 66.73 + 0.1 x 28.14 = 51.19).

^b Assumes 1/3 of all 37 new major source facilities will come on line in this year and all will read the regulation.

^c Person-hours per occurrence are from ESD manual Table 3 "Burden of NSPS and NESHAP Notification Reports, Excess Emission Reports and Recordkeeping".

^d Assumes 37 facilities will comply over the three year period or 12.3 per year.

^e Person-hours per occurrence are from ESD manual Table 4 "Burden of Performance Tests and Continuous Monitoring System (CMS) Demonstrations".

^f Assumes 20% of performance evaluations will be failures, requiring repeats.

^g Includes facilities from Year 1 that will also comply in Year 2.

^h Assumes one evaluation for each facility.

ⁱ Assumes 1% of 49.3 (148 over 3 years) new major source test cells/stands will be out of compliance.

^j Each continuous emission monitoring system (CEMS), which are required on all outlet streams, costs \$142,700. The total cost for CEMS is 12.3 facilities (37/3) x \$142,700 = \$1,759,967.

^k Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i=interest rate (7%) and t=equipment life (10 years). CRF=0.1423.

^l O&M for monitors includes operation and maintenance, annual RATA, quarterly CGA's, recordkeeping, and annual review and update

Table 3. Estimated Burden to Industry to Implement Reporting and Recordkeeping Requirements for Third Year after Promulgation

Burden item	(A) Person- hours per occurrence	(B) Number of occurrences per year	(C) Person-hours per respondent per year (C = A x B)	(D) Respondent s per year	(E) Technical person-hours per year (E = C x D)	(F) Management person-hours per year (F = E x 0.05)	(G) Clerical person-hours per year (G = E x 0.1)	(H) Cost, \$(a)
1. Applications	N/A							
2. Surveys and studies	N/A							
3. Reporting requirements								
A.Read regulation (b)	4	1	4	12	49	2	5	2,525
B.Notifications (c, d)								
Initial Notification (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of construction/reconstruction (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of anticipated startup (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of actual startup (c, d)	2	1	2	12.3	25	1	2	1,263
Notification of demonstration of CEMS (c, d)	2	1	2	12.3	25	1	2	1,263
C.Required activities								
Initial performance evaluation (e, d)	330	1	330	12.3	4,070	204	407	208,345
Demonstration of CEMS (e, d)	148	1	148	12.3	1,825	91	183	93,440
Repeat of performance evaluation (e, f, d)	330	0.2	66	12.3	814	41	81	41,669
CEMS training for personnel each year (c, g)	32	1	32	37.0	1,184	59	118	60,610
Maintain records of CEMS performance on a weekly basis (c, g)	1.5	50	75	37.0	2,775	139	278	142,054
D.Create information	Incl. in 3C							0
E.Gather existing information	Incl. in 3C							0
F.Write semi-annual report								
Write compliance status report (c, g)	4	2	8	37	296	15	30	15,152
Write performance evaluation report (h, d)	16	1	16	12.3	197	10	20	10,102
Write deviation report (c, g, i)	16	2	32	0.37	12	1	1	606
TOTAL RECURRENT BURDEN AND COST (R&R)					11,346	567	1,135	580,816
AVERAGE RECURRENT BURDEN AND COST PER FACILITY (R&R)					102	5	10	5,233
Monitoring costs								
ANNUAL CAPITAL COSTS FOR MONITORING EQUIPMENT (j)								1,759,967
ANNUALIZED CAPITAL COSTS FOR MONITORING EQUIPMENT (k)								751,800
TOTAL ANNUAL COSTS (O & M) (l)								865,800
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								1,617,600
AVERAGE RECURRENT COSTS PER FACILITY (MONITORING)								131,200

- a Costs are based on the following hourly rates: technical at \$45.04, management at \$66.73, and clerical at \$28.14. The composite hourly labor rate is \$51.19/hr ($45.04 + 0.05 \times 66.73 + 0.1 \times 28.14 = 51.19$).
- b Assumes 1/3 of all 37 new major source facilities will come on line in this year and all will read the regulation.
- c Person-hours per occurrence are from ESD manual Table 3 "Burden of NSPS and NESHAP Notification Reports, Excess Emission Reports and Recordkeeping".
- d Assumes 37 facilities will comply over the three year period or 12.3 per year.
- e Person-hours per occurrence are from ESD manual Table 4 "Burden of Performance Tests and Continuous Monitoring System (CMS) Demonstrations"
- f Assumes 20% of performance evaluations will be failures, requiring repeats.
- g Includes facilities from Year 1 and Year 2 that will also comply in Year 3.
- h Assumes one evaluation for each facility.
- i Assumes 1% of 49.3 (148 over 3 years) new major source test cells/stands will be out of compliance.
- j Each continuous emission monitoring system (CEMS), which are required on all outlet streams, costs \$142,700. The total cost for CEMS is 12.3 facilities $(37/3) \times \$142,700 = \$1,759,967$.
- k Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i(1+i)^t / ((1+i)^t - 1)$ where i =interest rate (7%) and t =equipment life (10 years). $CRF=0.1423$.
- l O&M for monitors includes operation and maintenance, annual RATA, quarterly CGA's, recordkeeping, and annual review and update

Table 4. Estimated Total Burden to Industry to Implement Reporting and Recordkeeping Requirements

Burden item	(A) Person- hours per occurrence	(B) Number of occurrences	(C) Person-hours per respondent (C = A x B)	(D) Respondent s	(E) Technical person-hours (E = C x D)	(F) Management person-hours (F = E x 0.05)	(G) Clerical person-hours (G = E x 0.1)	(H) Cost, \$(a)
1. Applications	N/A							
2. Surveys and studies	N/A							
3. Reporting requirements								
A. Read regulation (b)	4	1	4	37.0	148	7	15	7,576
B. Notifications (c, d)								
Initial Notification (c, d)	2	1	2	37.0	74	4	7	3,788
Notification of construction/reconstruction (c, d)	2	1	2	37.0	74	4	7	3,788
Notification of anticipated startup (c, d)	2	1	2	37.0	74	4	7	3,788
Notification of actual startup (c, d)	2	1	2	37.0	74	4	7	3,788
Notification of demonstration of CEMS (c, d)	2	1	2	37.0	74	4	7	3,788
C. Required activities								
Initial performance evaluation (e, d)	330	1	330	37.0	12,210	611	1,221	625,036
Demonstration of CEMS (e, d)	148	1	148	37.0	5,476	274	548	280,319
Repeat of performance evaluation (e, f, d)	330	0.2	66	37.0	2,442	122	244	125,007
CEMS training for personnel each year (c, g)	32	1	32	74.0	2,368	118	237	121,219
Maintain records of CEMS performance on a weekly basis (c, g)	1.5	50	75	74.0	5,550	278	555	284,107
D. Create information	Incl. in 3C							0
E. Gather existing information	Incl. in 3C							0
F. Write semi-annual report								
Write compliance status report (c, g)	4	2	8	74	592	30	59	30,305
Write performance evaluation report (h, d)	16	1	16	37.0	592	30	59	30,305
Write deviation report (c, g, i)	16	2	32	0.74	24	1	2	1,212
TOTAL RECURRENT BURDEN AND COST (R&R)					29,772	1,489	2,977	1,524,027
AVERAGE RECURRENT BURDEN AND COST PER FACILITY PER YEAR (R&R) (j)					268	13	27	13,730
Monitoring costs								
ANNUAL CAPITAL COSTS FOR MONITORING EQUIPMENT (k)								5,279,900
ANNUALIZED CAPITAL COSTS FOR MONITORING EQUIPMENT (l)								1,503,600
TOTAL ANNUAL COSTS (O & M) (m)								1,731,600
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								3,235,200
AVERAGE RECURRENT COSTS PER FACILITY PER YEAR (MONITORING) (i)								29,146

^a Costs are based on the following hourly rates: technical at \$45.04, management at \$66.73, and clerical at \$28.14. The composite hourly labor rate is \$51.19/hr ($45.04 + 0.05 \times 66.73 + 0.1 \times 28.14 = 51.19$).

^b Assumes all 37 new major source facilities will come on line in the first three years and all will read the regulation.

^c Person-hours per occurrence are from ESD manual Table 3 "Burden of NSPS and NESHAP Notification Reports, Excess Emission Reports and Recordkeeping".

^d Assumes 37 facilities will comply over the three year period.

^e Person-hours per occurrence are from ESD manual Table 4 "Burden of Performance Tests and Continuous Monitoring System (CMS) Demonstrations".

^f Assumes 20% of performance evaluations will be failures, requiring repeats.

^g Includes facilities from Year 1, Year 2, and Year 3.

^h Assumes one evaluation for each facility.

ⁱ Assumes 1% of 148 new major source test cells/stands will be out of compliance in the first 3 years.

^j These values are averaged over the three year period for the 37 facilities.

^k Each continuous emission monitoring system (CEMS), which are required on all outlet streams, costs \$142,700. The total cost for CEMS is 37 facilities \times \$142,700 = \$5,279,900.

^l Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i = interest rate (7%) and t = equipment life (10 years). $CRF = 0.1423$.

^m O&M for monitors includes operation and maintenance, annual RATA, quarterly CGA's, recordkeeping, and annual review and update

Table 5. Estimated Total Burden and Cost to the Agency to Implement Reporting and Recordkeeping Requirements

Burden item	(A) Person- hours per occurrence	(B) Number of occurrences	(C) EPA-hours per facility (C = A x B)	(D) Facilities	(E) Technical person- hours (E = C x D)	(F) Management person-hours (F = E x 0.05)	(G) Clerical person- hours (G = E x 0.1)	(H) Cost, \$ (a)
1. Attend CEMS performance evaluation (b, c, d)	32	1	32	7.40	237	12	24	1,567
2. Repeat performance evaluation								
A. Retesting preparation (b, e, d)	12	1	12	7.40	89	4	9	588
B. Attend retesting (b, f, d)	32	1	32	1.85	59	3	6	392
3. Deviations--enforcement activities (g, h)	16	1	16	2.96	47	2	5	2,201
4. Reporting requirements								
A. Review regulation	2	2	4	3.00	12	1	1	558
B. Review waivers (i)	2	2	4	0	0	0	0	0
C. Review semi-annual reports								
Review compliance status report (j)	2	2	4	73.26	293	15	29	13,618
Review performance evaluation report (k, l)	2	1	2	37.00	74	4	7	3,439
Review deviation report (h)	2	2	4	2.96	12	1	1	550
ANNUAL AVERAGE TOTAL BURDEN AND COST (SALARY) NATIONWIDE					823	41	82	22,912
ANNUAL AVERAGE TRAVEL EXPENSES (d, m)								1,870
AVERAGE TOTAL COST = ANNUAL AVERAGE COST + ANNUAL AVERAGE TRAVEL EXPENSES					823	41	82	24,781
AVERAGE PER YEAR					274	14	27	8,260

^a Costs are based on the following hourly rates: technical at \$40.80, management at \$67.44, and clerical at \$22.99.

These costs are based on 2000 wages listed by U.S. Office of Personnel Management for GS Level 12, Step 5; GS Level 15, Step 5; and GS Level 7, Step 5, respectively.

^b Assumes 1 CEMS per facility

^c Assumes EPA will attend 20% of performance evaluations for 37 facilities using add-on control devices

^d Assumes equipment life of 10 years and an interest rate of 7% to annualize costs

^e Assumes 20% of facilities will fail the initial performance evaluation and all will repeat it

^f Assumes EPA will attend 25% of the retests

^g Assumes an EPA follow-up visit of 2 days per deviation report

^h Assumes 1% of 148 major source test cells/stands will be out of compliance.

ⁱ Assumes no new or reconstructed major source facilities will apply for a waiver.

^j Assumes 99% of 37 major source facilities will be in compliance.

^k Assumes one performance evaluation per facility.

^l Assumes 37 facilities will comply over the 5 year period.

^m Assumes performance evaluations require 4 days per facility and enforcement visits require 2 days per facility: Adds Year 1 costs, Year 2 costs, and Year 3 costs.